

Listing of the Claims:

Claims 1-2 (Canceled)

Claim 3 (Original) A method of determining whether a VLAN ID may be assigned to a terminal, said method comprising the steps of:

a switch sending a GVRP packet message including VLAN IDs that the switch itself manages;

a terminal storing VLAN IDs managed by the switch by monitoring GVRP packet messages sent by the switch, and describing the VLAN IDs and its own Gateway Address in confirmation frames constituted by tag frames for sending to the switch;

the switch sending a response frame to the terminal in response to the confirmation frame when a pair consisting of the VLAN ID managed by the switch itself and an Internet Protocol Address for the VLAN ID and a pair of the VLAN ID described in the confirmation frame and the Gateway Address sent by the terminal match; and

the terminal determining whether the VLAN ID described in the confirmation frame is a VLAN ID which it can assign to itself, by receiving response frames sent by the switch in response to confirmation frames.

Claim 4 (Original) The method of claim 3, wherein, with regards to the sending of a response frame to the terminal in response to the confirmation frame, when it is determined that processing is possible for a matching VLAN ID based on tag information described in the confirmation frame sent by the terminal, a response frame is sent back to the terminal in response to the confirmation frame.

Claim 5 (Original) The method of claim 4, wherein when a plurality of VLAN IDs are included in the GVRP packet message, the terminal selects an arbitrary VLAN ID from the stored VLAN IDs, makes a confirmation frame, and sends the confirmation frame to the switch, so that when no response frame from the switch is received within a preset time, a VLAN ID other than the selected VLAN ID is selected, a new confirmation frame is made, and the confirmation frame is sent to the server.

Claim 6 (Original) The method of claim 4, wherein when a plurality of VLAN IDs are included in the GVRP packet message, the terminal makes the same number of confirmation frames as there are stored VLAN IDs, describing individual VLAN IDs for sending to the switch, with a VLAN ID described in a corresponding confirmation frame being described at the response frame from the switch.

Claim 7 (Currently Amended) A method of determining whether a VLAN ID may be assigned to a terminal, said method comprising the steps of:

- a switch sending a GVRP packet message including VLAN IDs that the switch itself manages;
- a terminal monitoring GVRP packet messages sent by the switch so as to store VLAN IDs managed by the switch, and describing the VLAN ID in a request frame for sending to a server;
- the switch sending the request frame sent by the terminal to the server when the VLAN ID described in the request frame sent by the terminal and the VLAN ID to which the

server belongs match;

the server sending a response frame to the terminal in response to the request frame switched by the switch; and

the terminal determining whether the VLAN ID described in the ~~confirmation~~ request frame is a VLAN ID which it can assign to itself, by receiving response frames sent by the server in response to request frames.

Claim 8 (Original) The method of claim 7, wherein the server sends a response frame to the terminal in response to the request frame switched by the switch, address information preset at the server is included in the response frame for the request frame, and the terminal sets its own address information based on the address information included in the response frame for the request frame.

Claim 9 (Original) The method of claim 8, wherein when a plurality of VLAN IDs are included in the GVRP packet message, the terminal selects an arbitrary VLAN ID from the stored VLAN IDs, makes a request frame, and sends the request frame to the server so that when no response frame from the server is received within a preset time, a VLAN ID other than the selected VLAN ID is selected, a new request frame is made, and the request frame is sent to the server.

Claim 10 (Original) The method of claim 8, wherein when a plurality of VLAN IDs are included in the GVRP packet message, the terminal makes the same number of confirmation frames as there are stored VLAN IDs, describing individual VLAN IDs for

sending to the server, with a VLAN ID described in a corresponding confirmation frame being described at the response frame from the server.

Claim 11 (New) A method of determining whether a VLAN ID may be assigned to a terminal, said method comprising the steps of:

sending a GVRP packet message via a switch, said GVRP packet message including VLAN IDs that are managed by the switch;

storing VLAN IDs managed by the switch in a terminal that monitors GVRP packet messages sent by the switch where the terminal sends tag frames describing the VLAN IDs and its own Gateway Address in confirmation frames to the switch;

sending a response frame to the terminal from the switch in response to a confirmation frame comprising a VLAN ID managed by the switch itself and an Internet Protocol Address for the VLAN ID when the switch determines that the VLAN ID described in the confirmation frame and the Gateway Address sent by the terminal match the VLAN ID managed by the switch and its Internet Protocol Address; and

determining whether the VLAN ID described in the confirmation frame is a VLAN ID which the terminal can assign to itself, by receiving response frames sent by the switch in response to the confirmation frame.

Claim 12 (New) The method of claim 11, wherein the step of sending of a response frame to the terminal in response to the confirmation frame includes determining if processing is possible for a matching VLAN ID based on tag information described in the confirmation frame sent by the terminal, and if processing is possible, the

switch sends a response frame to the terminal.

Claim 13 (New) The method of claim 12, wherein when a plurality of VLAN IDs are included in the GVRP packet message, the terminal selects an arbitrary VLAN ID from the stored VLAN IDs to make a new confirmation frame and to send the new confirmation frame to the switch, so that when no response frame from the switch is received within a preset time, a VLAN ID other than the selected VLAN ID is selected so that a new confirmation frame is made, and the new confirmation frame is sent to a server.

Claim 14 (New) The method of claim 12, wherein when a plurality of VLAN IDs are included in the GVRP packet message, the terminal makes the same number of confirmation frames as there are stored VLAN IDs, describing individual VLAN IDs for sending to the switch, with a VLAN ID described in a corresponding confirmation frame being described at the response frame from the switch.

Claim 15 (New) A method of determining whether a VLAN ID may be assigned to a terminal, said method comprising the steps of:

sending a GVRP packet message including VLAN IDs via a switch, the VLAN IDs being managed by the switch;

monitoring GVRP packet messages sent by the switch in a terminal so as to store VLAN IDs managed by the switch, and describing a VLAN ID in a request frame for sending to a server;

sending the request frame sent by the terminal to the server when the switch determines that the VLAN ID described in the request frame sent by the terminal and the VLAN ID to which the server belongs match;

sending a response frame via the server to the terminal in response to the request frame switched by the switch; and

determining at the terminal whether the VLAN ID described in the request frame is a VLAN ID which the terminal can assign to itself, by receiving response frames sent by the server in response to request frames.

Claim 16 (New) The method of claim 15, wherein the server sends a response frame to the terminal in response to the request frame switched by the switch, address information preset at the server is included in the response frame for the request frame, and the terminal sets its own address information based on the address information included in the response frame for the request frame.

Claim 17 (New) The method of claim 16, wherein when a plurality of VLAN IDs are included in the GVRP packet message, the terminal selects an arbitrary VLAN ID from the stored VLAN IDs to make a new request frame and to send the new request frame to the server so that when no response frame from the server is received within a preset time, a VLAN ID other than the selected VLAN ID is selected, a new request frame is made, and the new request frame is sent to the server.

Claim 18 (Original) The method of claim 16, wherein when a plurality of VLAN IDs are included in the GVRP packet message, the terminal makes the same number of confirmation frames as there are stored VLAN IDs, describing individual VLAN IDs for sending to the server, with a VLAN ID described in a corresponding confirmation frame being described at the response frame from the server.